

IN THE CLAIMS

1-26 (canceled)

27. (previously presented) A primary wafer alkaline cell comprising a negative and a positive terminal, an outer boundary surface covering said cell, and a pair of opposing sides comprising at least the majority of said boundary surface of said cell, said opposing sides defining a short cell dimension therebetween defining the cell thickness, said cell comprising an anode assembly and a cathode assembly bonded together forming a laminate structure, said anode assembly comprising an anode comprising zinc and aqueous alkaline electrolyte and said cathode assembly comprising a cathode comprising manganese dioxide and aqueous alkaline electrolyte;

wherein said anode assembly comprises a anode housing comprising an anode frame comprising plastic material, said anode frame having an inner peripheral edge defining the boundary of an anode cavity for housing said anode, an outer peripheral edge defining the outer boundary of the anode frame, wherein said anode frame has a front side and opposing back side comprising said peripheral edges and wherein said anode assembly further comprises an anode current collector sheet consisting essentially of metal bonded with bonding material directly to the back side of said anode frame so that it faces an outer surface boundary of the cell and said anode is inserted into said cavity so that it is in contact with a portion of said anode current collector sheet;

wherein the anode frame width is at least as wide as the cell thickness to provide a first elongated leakage block path for said cell, said first electrolyte leakage block path defined by said bonding material between said anode frame and said anode current collector sheet to reduce the chance of electrolyte leaking from the cell interior to the external environment;

wherein the cathode assembly comprises a cathode frame comprising a plastic material, said cathode frame having an inner peripheral edge defining the boundary of a cathode cavity, an outer peripheral edge defining the outer boundary of the cathode frame, said cathode frame having a first side and opposing second side comprising said peripheral edges; said cathode assembly further comprising a cathode current collector sheet consisting essentially of metal bonded directly to the opposing second side of said cathode frame so that it faces an outer surface boundary of the cell; and a cathode inserted into said cathode cavity so that it is in contact with said cathode current collector sheet.

28. (original) The cell of claim 27 wherein plastic film wrap is applied over the cell exterior surface leaving exposed a negative terminal contact portion and positive terminal contact portion on the cell surface.

29. (original) The cell of claim 28 wherein there is adhesive sealant between said plastic film wrap and the cell exterior surface.

30. (original) The cell of claim 28 wherein a band of said film wrap is applied peripherally around the edges which comprise the short dimension of said cell and heat shrunk over at least the majority of said edges of the cell.

31. (original) The cell of claim 28 wherein the plastic film wrap comprises at least a first and second plastic film layer.

32. (original) The cell of claim 31 wherein there is adhesive sealant between the cell surface and said first plastic film layer.

33. (original) The cell of claim 32 wherein there is adhesive sealant between said first plastic film layer and said second plastic film layer.

34. (original) The cell of claim 32 wherein there is adhesive sealant between the cell surface and at least a portion of said second plastic film layer.

35. (original) The cell of claim 31 wherein there is adhesive sealant between the cell surface and said first plastic film layer, there is adhesive sealant between the cell surface and a portion of said second film layer and there is adhesive sealant between said first and second film layers.

36. (original) The cell of claim 35 wherein each of the first and second film layers are applied in the form of a closed film band, and acting together cover over at least the majority of said cell surface.

37. (original) The cell of claim 35 wherein each of the first and second film layers are applied in the form of a closed film band and acting together cover over at least the majority of said cell surface and wherein said film bands have their central longitudinal axis at right angles to each other.

38. (original) The cell of claim 36 wherein said first film band is applied peripherally around the edges which comprise the short dimension of said cell and heat shrunk over at least the majority of said edges of the cell; and wherein said second film band is applied laterally over the majority of the two opposing sides of said cell and heat shrunk to cover over at least a part of said first film band.

39. (original) The cell of claim 36 wherein each of said bands is heat shrunk over said cell.

40. (original) The cell of claim 38 wherein the adhesive sealant between the cell surface and said first film band, the adhesive sealant between the cell surface and said second film band and the adhesive sealant between said first and second film bands provides a second electrolyte leakage block path for said cell.

41. (original) The cell of claim 40 wherein said second electrolyte leakage block path extends from the outer peripheral edge of said anode frame to said negative terminal, said distance being at least as long as the cell thickness.

42. (original) The cell of claim 29 wherein the overall thickness of said cell is between about 0.5 and 6 mm, wherein

said overall thickness is defined as the distance between the outside surface of said opposing sides of said cell.

43. (original) The cell of claim 42 wherein said first and second electrolyte leakage block paths together span a distance at least between about 1.5 and 4 times the cell thickness.

44. (original) The cell of claim 29 wherein the exposed area on the cell surface forming said negative terminal contact comprises between about 1 and 5 percent of the cell footprint area.

45. (original) The cell of claim 29 wherein said cell is of cuboid shape and rigid structure.

46. (original) The cell of claim 29 wherein the cathode comprises solids comprising manganese dioxide and an aqueous electrolyte solution comprising potassium hydroxide in admixture with said solids, wherein the cathode is a semisolid having a porosity between about 45% and 70%.

47. (original) The cell of claim 46 wherein the cathode material further comprises graphitized carbon black.

48. (canceled)

49. (previously presented) The cell of claim 27 wherein the anode and cathode frames are bonded together with a separator therebetween to form a laminate structure.

50. (original) The cell of claim 49 wherein said laminate structure forms said cell, said laminate structure being adhesively sealed so that cell contents are retained within said structure.

51. (original) The cell of claim 49 wherein the positive terminal is in electrical communication with the cathode current sheet and the negative terminal is in electrical communication with said anode current collector sheet.

52. (original) The cell of claim 27 wherein said opposing sides of said cell are parallel to each other.

53. (canceled)

54. (original) The cell of claim 50 wherein said anode and cathode frames are comprised of electrically insulating material.

55. (canceled)

56. (original) The cell of claim 27 wherein the anode current collector sheet comprises copper.

57. (previously presented) The cell of claim 27 wherein the cathode current collector sheet consists of metal and has a coating of carbon thereon.

58. (previously presented) The cell of claim 49 wherein the cathode current collector sheet comprises nickel and said cathode current collector sheet has a coating of carbon thereon.

59. (previously presented) The cell of claim 27 wherein the cathode current collector sheet comprises nickel.

60-77 (canceled)